=> analyze l1
ENTER ANSWER NUMBER OR RANGE (1-):1
ENTER DISPLAY CODE (TI) OR ?:rn
L2 ANALYZE L1 1 RN: 57 TERMS

=> fil reg
COST IN U.S. DOLLARS

₽T

SINCE FILE TOTAL ENTRY SESSION 12.84 13.05

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 15:38:27 ON 10 MAY 2005 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2005 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 9 MAY 2005 HIGHEST RN 850130-09-5 DICTIONARY FILE UPDATES: 9 MAY 2005 HIGHEST RN 850130-09-5

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

=> s 12 L3 57 L2

=> s 13 L4 57 L2

=> s 14 and piperazin?
576449 PIPERAZIN?
L5 11 L4 AND PIPERAZIN?

=> d 1-11

L5 ANSWER 1 OF 11 REGISTRY COPYRIGHT 2005 ACS on STN RN 283167-27-1 REGISTRY

```
ED Entered STN: 04 Aug 2000
```

CN Piperazine, 1-acetyl-4-[2-(4-fluorophenyl)-2-oxoethyl]-, monohydrochloride (9CI) (CA INDEX NAME)

MF C14 H17 F N2 O2 . C1 H

SR CA

LC STN Files: CA, CAPLUS, USPAT2, USPATFULL

CRN (749837-14-7)

● HCl

2 REFERENCES IN FILE CA (1907 TO DATE)

2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L5 ANSWER 2 OF 11 REGISTRY COPYRIGHT 2005 ACS on STN

RN 283167-23-7 REGISTRY

ED Entered STN: 04 Aug 2000

CN 1-Piperazinesulfonamide, 4-acetyl-N-(4-fluorophenyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C12 H16 F N3 O3 S

SR CA

LC STN Files: CA, CAPLUS, USPAT7, USPATFULL

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)

2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L5 ANSWER 3 OF 11 REGISTRY COPYRIGHT 2005 ACS on STN

RN 283167-21-5 REGISTRY

ED Entered STN: 04 Aug 2000

CN 1-Piperazinecarboxylic acid, 4-[[(4-fluorophenyl)amino]carbonyl]-, methyl ester (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C13 H16 F N3 O3

SR CA

LC STN Files: CA, CAPLUS, USPAT2, USPATFULL

$$\begin{array}{c|c} O & & & & \\ MeO-C & & & O & & \\ \hline & N & & C-NH & & \\ \hline \end{array}$$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)

2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L5 ANSWER 4 OF 11 REGISTRY COPYRIGHT 2005 ACS on STN

RN 283167-20-4 REGISTRY

ED Entered STN: 04 Aug 2000

CN 1-Piperazinecarboxamide, N-(4-fluorophenyl)-4-[4-(trifluoromethoxy)benzoyl]- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C19 H17 F4 N3 O3

SR CA

LC STN Files: CA, CAPLUS, USPATZ, USPATFULL

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)

2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L5 ANSWER 5 OF 11 REGISTRY COPYRIGHT 2005 ACS on STN

RN 283167-04-4 REGISTRY

ED Entered STN: 04 Aug 2000

CN 1-Piperazinecarboxylic acid, 4-[(4-pyridinylamino)carbonyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C15 H22 N4 O3

SR CA

LC STN Files: CA, CAPLUS, USPATZ, USPATFULL

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)

2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L5 ANSWER 6 OF 11 REGISTRY COPYRIGHT 2005 ACS on STN

RN 283167-03-3 REGISTRY

ED Entered STN: 04 Aug 2000

CN 1-Piperazinecarboxylic acid, 4-[[(4-fluorophenyl)amino]carbonyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C16 H22 F N3 O3

SR CA

LC STN Files: CA, CAPLUS, USPAT7, USPATFULL

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)

2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L5 ANSWER 7 OF 11 REGISTRY COPYRIGHT 2005 ACS on STN

RN **283167-02-2** REGISTRY

ED Entered STN: 04 Aug 2000

CN 1-Piperazinecarboxamide, 4-acetyl-N-(4-fluorophenyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C13 H16 F N3 O2

SR CA

LC STN Files: CA, CAPLUS, USPAT7, USPATFULL

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)

2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L5 ANSWER 8 OF 11 REGISTRY COPYRIGHT 2005 ACS on STN

RN **283167-01-1** REGISTRY

ED Entered STN: 04 Aug 2000

CN 1-Piperazinecarboxamide, 4-acetyl-N-4-pyridinyl- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C12 H16 N4 O2

SR CA

LC STN Files: CA, CAPLUS, USPAT2, USPATFULL

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L5 ANSWER 9 OF 11 REGISTRY COPYRIGHT 2005 ACS on STN

RN 274686-11-2 REGISTRY

ED Entered STN: 05 Jul 2000

CN 1-Piperazinesulfonyl chloride, 4-acetyl- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 1-Acetyl-4-piperazinesulfonyl chloride

FS 3D CONCORD

MF C6 H11 C1 N2 O3 S

SR CA

LC STN Files: CA, CAPLUS, USPATZ, USPATFULL

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- 3 REFERENCES IN FILE CA (1907 TO DATE)
- 3 REFERENCES IN FILE CAPLUS (1907 TO DATE)
- L5 ANSWER 10 OF 11 REGISTRY COPYRIGHT 2005 ACS on STN
- RN **57260-71-6** REGISTRY
- ED Entered STN: 16 Nov 1984
- CN 1-Piperazinecarboxylic acid, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

OTHER NAMES:

- CN 1,1-Dimethylethyl 1-piperazinecarboxylate
- CN 1,1-Dimethylethyl piperazin-1-carboxylate
- CN 1-(tert-Butoxycarbonyl)piperazine
- CN 1-(tert-Butyloxycarbonyl)piperazine
- CN 1-Piperazinecarboxylic acid tert-butyl ester
- CN 1-[(1,1-Dimethylethoxy)carbonyl]piperazine
- CN 4-(tert-Butyloxycarbonyl)piperazine
- CN N-(tert-Butoxycarbonyl)piperazine
- CN N-BOC-Piperazine
- CN N-tert-Butyloxycarbonylpiperazine
- CN tert-Butyl 1-piperazinecarboxylate
- FS 3D CONCORD
- DR 131339-76-9
- MF C9 H18 N2 O2
- CI COM
- LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, CSCHEM, IFICDB, IFIPAT, IFIUDB, MSDS-OHS, SYNTHLINE, TOXCENTER, USPAT2,

USPATFULL

(*File contains numerically searchable property data)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1190 REFERENCES IN FILE CA (1907 TO DATE)

4 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

1192 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L5 ANSWER 11 OF 11 REGISTRY COPYRIGHT 2005 ACS on STN

RN 13889-98-0 REGISTRY

ED Entered STN: 16 Nov 1984

CN Piperazine, 1-acetyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

OTHER NAMES:

CN 1-(Piperazin-1-yl)ethanone

CN 1-(Piperazinyl)ethanone

CN 1-Acetylpiperazine

CN 4-Acetylpiperazine

CN N-Acetylpiperazin

CN N-Acetylpiperazine

CN NSC 39649

FS 3D CONCORD

MF C6 H12 N2 O

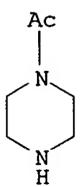
CI COM

LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, CHEMLIST, CSCHEM, IFICDB, IFIPAT, IFIUDB, SYNTHLINE,

TOXCENTER, USPAT7, USPATFULL

(*File contains numerically searchable property data)
Other Sources: EINECS**

(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

399 REFERENCES IN FILE CA (1907 TO DATE)

401 REFERENCES IN FILE CAPLUS (1907 TO DATE)

2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

```
=> s 13889-98-0 or 57260-71-6 or 274686-11-2
             1 13889-98-0
                 (13889-98-0/RN)
             1 57260-71-6
                 (57260-71-6/RN)
             1 274686-11-2
                 (274686-11-2/RN)
             3 13889-98-0 OR 57260-71-6 OR 274686-11-2
L6
=> d his
     (FILE 'HOME' ENTERED AT 15:38:02 ON 10 MAY 2005)
     FILE 'CAPLUS' ENTERED AT 15:38:08 ON 10 MAY 2005
              1 S US6710043/PN
L1
L2
            ANALYZE L1 1 RN:
                                  57 TERMS
     FILE 'REGISTRY' ENTERED AT 15:38:27 ON 10 MAY 2005
             57 S L2
L3
             57 S L3
L4
            11 S L4 AND PIPERAZIN?
L5
            3 S 13889-98-0 OR 57260-71-6 OR 274686-11-2
L6
=> s 15 not 16
             8 L5 NOT L6
L7
=> fil caplus
COST IN U.S. DOLLARS
                                                 SINCE FILE
                                                                 TOTAL
                                                     ENTRY
                                                               SESSION
                                                     26.56
                                                                 39.61
FULL ESTIMATED COST
```

FILE 'CAPLUS' ENTERED AT 15:40:53 ON 10 MAY 2005 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 10 May 2005 VOL 142 ISS 20 FILE LAST UPDATED: 9 May 2005 (20050509/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 17 L8 2 L7

=> d bib abs hitstr 1-2

L8 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2000:861479 CAPLUS

DN 134:29431

TI Agent for expression of long-term potentiation of synaptic transmission comprising compound having brain somatostatin activation property

IN Matsuoka, Nobuya; Satoh, Masamichi

PA Fujisawa Pharmaceutical Co., Ltd., Japan

SO PCT Int. Appl., 74 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

22400	PAI	ENT 1	NO.			KINI	D :	DATE			APP	LIC	AT]	ON 1	.OV		D	ATE	
PI		2000		A2					WO 2000-JP3			JP33:	34		20000524				
	WO	2000	0728	34		A3		2002	0711										
		W:	BR,	CA,	CN,	JP,	KR,	US											
		RW:	AT,	BE,	CH,	CY,	DE,	DK,	ES,	FI,	FR	, G	B,	GR,	IE,	IT,	LU,	MC,	NL,
			PT,																
	US	6344	358			B1		2002	0205		US	199	9-3	3217	45		19	9990	528
	EP	1235	575			A2		2002	0904		ΕP	200	00-9	9298	54		20	0000	524
		R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR	k, I	T,	LI,	LU,	NL,	SE,	MC,	PT,
			IE,	FI,	CY														
	JP	2003	52212	20		Т2		2003	0722		JP	200	00-6	5209	46		20	0000	524
	US	2002	0907	32		A1		2002	0711		US	200	2-4	1159	2		20	020	110
	US	6613	572			B2		2003	0902										
PRAI	US	1999	-321	745		Α		1999	0528										
	WO	2000	-JP3	334		W		2000	0524										

OS MARPAT 134:29431

The present invention relates to an agent for the expression of long-term potentiation of synaptic transmission, which contains a compound having a brain somatostatin activation property as an active ingredient and to a screening method of an agent for the expression of long-term potentiation of synaptic transmission, which uses a somatostatin releasing property as an index. E.g., to a solution of O-Ph N-(4-pyridyl)carbamate in 1,2-dichloroethane was added a suspension of 1-acetylpiperazine to give 1-acetyl-4-(4-pyridylaminocarbonyl)piperazine.

IT 283167-01-1P 283167-02-2P 283167-03-3P 283167-04-4P 283167-20-4P 283167-21-5P 283167-23-7P 283167-27-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of agents for expression of long-term potentiation of synaptic transmission)

RN 283167-01-1 CAPLUS

CN 1-Piperazinecarboxamide, 4-acetyl-N-4-pyridinyl- (9CI) (CA INDEX NAME)

RN 283167-02-2 CAPLUS

CN 1-Piperazinecarboxamide, 4-acetyl-N-(4-fluorophenyl)- (9CI) (CA INDEX NAME)

RN 283167-03-3 CAPLUS

CN 1-Piperazinecarboxylic acid, 4-[[(4-fluorophenyl)amino]carbonyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 283167-04-4 CAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(4-pyridinylamino)carbonyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 283167-20-4 CAPLUS

CN 1-Piperazinecarboxamide, N-(4-fluorophenyl)-4-[4-(trifluoromethoxy)benzoyl]- (9CI) (CA INDEX NAME)

RN 283167-21-5 CAPLUS

CN 1-Piperazinecarboxylic acid, 4-[[(4-fluorophenyl)amino]carbonyl]-, methyl ester (9CI) (CA INDEX NAME)

RN 283167-23-7 CAPLUS

CN 1-Piperazinesulfonamide, 4-acetyl-N-(4-fluorophenyl)- (9CI) (CA INDEX NAME)

RN 283167-27-1 CAPLUS

CN Piperazine, 1-acetyl-4-[2-(4-fluorophenyl)-2-oxoethyl]-, monohydrochloride (9CI) (CA INDEX NAME)

HCl

L8 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2000:493515 CAPLUS

DN 133:105053

TI Preparation of acylpiperazines, acylpiperidines, and related compounds as cholinergic agonists.

IN Yamada, Akira; Aoki, Satoshi

PA Fujisawa Pharmaceutical Co., Ltd., Japan

SO PCT Int. Appl., 68 pp.

CODEN: PIXXD2

DT Patent

1.77 D.1.	English																
	CNT 1	•															
	PATENT	NO.			KINI	D	DATE			APPI	CICAT	ION I	NO.		DZ	ATE	
ΡI	WO 2000	0420	11		A1	-	2000	0720	,	 WO 2	2000-	 JP17			20	0000	 106
											BR,						
		DE,	DK,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,
		JP,	KE,	KG,	KR,	KZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK,	MN,
		MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	TJ,	TM,
		TR,	TT,	UA,	UG,	US,	UZ,	VN,	YU,	ZA,	ZW,	AM,	AZ,	BY,	KG,	KZ,	MD,
		•	TJ,														
	RW:	GH,	GM,	KE,	LS,	MW,	SD,	SL,	SZ,	TZ,	UG,	ZW,	AT,	BE,	CH,	CY,	DE,
		•	•	•	-	-	•		-	-	MC,	_	-	SE,	BF,	BJ,	CF,
		•	•	•	-	-	-	-	-	-	SN,						
	CA 2360										-000						
	EP 1140																
	R:	•	•	•	_	_	_	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
		•	•	. •	LV,	-						0550			0		100
	BR 2000						2001				2000-					0000	
	TR 2001						2002				2001-					0000	
	JP 2002									JP 2	2000-	5935	79		2	0000	106
	JP 3617						2005					1000			0	0000	100
	AU 7604		^ 4		B2		2003			AU 2	2000-	1890	4		2	0000	100
	AU 2000		04		A5		2000				2001	1007	0.7		0	0000	100
	RU 2208		1.0		C2		2003				2001-					0000	
	ZA 2001		13		A		2002				2001-					0010	
	US 6710	043			B1		2004	0323		US 2	2001-	8699	62		2	0010	1 T O

	HK 1044337	A1	20041126	HK 2002-105923	20020813
	JP 2004002414	A2	20040108	JP 2003-132491	20030512
	US 2004014745	A1	20040122	US 2003-618743	20030715
PRA	I AU 1999-8180	Α	19990114		
	JP 2000-593579	A3	20000106		
	WO 2000-JP17	W	20000106		
	US 2001-869962	A3	20010710		
os	MARPAT 133:105053				

AB R1ANR3EXR4YQR2 [R1 = acyl; R2 = (substituted) alkyl, alkoxy, alkylamino, alkenyl, alkenyloxy, alkenylamino, cycloalkyl, aryl, aryloxy, arylamino, heterocyclyl, acyl, etc.;, A = bond, CO, SO2; E = (substituted) alkylene; X = CH, N; Y = bond, alkylene, imino; Q = CH2, CO, SO2, N:CH; R3, R4 = H, alkyl; R3R4 = alkylene optionally condensed with cyclic hydrocarbyl or heterocyclyl], were prepared Thus, 1-acetylpiperazine in THF was treated with 4-fluorophenyl isocyanate followed by stirring for 1 h to give 1-acetyl-4-(4-fluorophenylcarbamoyl)piperazine. The latter at 1 mg/kg i.p. in rats gave 1.14 penile erections/h.

IT 283167-01-1P 283167-02-2P 283167-03-3P 283167-04-4P 283167-20-4P 283167-21-5P 283167-23-7P 283167-27-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of acylpiperazines, acylpiperidines, and related compds. as cholinergic agonists)

RN 283167-01-1 CAPLUS

CN 1-Piperazinecarboxamide, 4-acetyl-N-4-pyridinyl- (9CI) (CA INDEX NAME)

RN 283167-02-2 CAPLUS

CN 1-Piperazinecarboxamide, 4-acetyl-N-(4-fluorophenyl)- (9CI) (CA INDEX NAME)

RN 283167-03-3 CAPLUS

CN 1-Piperazinecarboxylic acid, 4-[[(4-fluorophenyl)amino]carbonyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 283167-04-4 CAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(4-pyridinylamino)carbonyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 283167-20-4 CAPLUS

CN 1-Piperazinecarboxamide, N-(4-fluorophenyl)-4-[4-(trifluoromethoxy)benzoyl]- (9CI) (CA INDEX NAME)

RN 283167-21-5 CAPLUS

CN 1-Piperazinecarboxylic acid, 4-[[(4-fluorophenyl)amino]carbonyl]-, methyl ester (9CI) (CA INDEX NAME)

RN 283167-23-7 CAPLUS

CN 1-Piperazinesulfonamide, 4-acetyl-N-(4-fluorophenyl)- (9CI) (CA INDEX NAME)

RN 283167-27-1 CAPLUS

CN Piperazine, 1-acetyl-4-[2-(4-fluorophenyl)-2-oxoethyl]-, monohydrochloride (9CI) (CA INDEX NAME)

RE.CNT 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT